WHAT IS CLAIMED IS:

1. A safety device of a coffee pot comprising:

a pot body provided with a water tank and a handle:

a n electric heater installed under said water tank: and

a probe unit provided on said electric heater in said water tank.

2. The safety device of a coffee pot as claimed in Claim 1, wherein said probe unit is provided with a metal probe, said metal probe wrapped up by an insulating material.

3. The safety device of a coffee pot comprising a control circuit, said control circuit comprising:

a metal probe, said metal probe able to produce a signal of micro voltage difference for a resistance R1 according to a height of the water level of said water tank:

two comparison circuits OP1, OP2 actuated to operate by said signal coming from said resistance R1, said two comparison circuits OP1, OP2 actuating a single-plate processing unit MCU and an OP operational circuit (A) to operate, said single-plate processing unit MCU and said OP operational circuit (A) controlling a switch control unit to operate, said switch control unit turning on and off the electric source of said electric heater of said coffee pot.